

Claim Listing with Markings to Show Current Amendments

The claims are listed below with markings to show current amendments to claims existing after entry of the Response to Final Office Action previously submitted to the U.S. Patent & Trademark Office on May 30, 2006. Thus, this listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A topical formulation for reducing skin irritation in animals comprising:  
    ~~a non-strontium active ingredient,~~  
    a salt comprising aqueous-soluble divalent strontium cation in an amount of about 0.5% by weight to about 14% by weight of the total formulation,  
    an irritant ingredient, and  
    a suitable topical formulation vehicle;  
~~wherein said topical formulation is packaged with instructions directing the administration of said composition to the external skin of an animal subject.~~
2. (Withdrawn) The formulation of claim 1 wherein the formulation is an aqueous liquid.
3. (Original) The formulation of claim 1 wherein the formulation is a cream, lotion or gel.
4. (Withdrawn) The formulation of claim 1 wherein the formulation is a solid.
5. (Withdrawn) The formulation of claim 2 wherein the formulation vehicle comprises water and an organic solvent.
6. (Withdrawn) The formulation of claim 5 wherein the organic solvent is an alcohol.
7. (Withdrawn) The formulation of claim 2 wherein the formulation vehicle comprises a

surfactant.

8. (Withdrawn) The formulation of claim 7 wherein the surfactant comprises a nonionic surfactant.

9. (Withdrawn) The formulation of claim 7 wherein the surfactant comprises a cationic surfactant.

10. (Withdrawn) The formulation of claim 7 wherein the surfactant comprises an amphoteric surfactant.

11. (Withdrawn) The formulation of claim 7 wherein the surfactant comprises at least one anionic surfactant and at least one amphoteric surfactant.

12. (Withdrawn) The formulation of claim 11 wherein the anionic surfactant comprises at least one surfactant selected from the group consisting of ammonium laureth sulfate, TEA laureth sulfate, sodium lauryl sulfosuccinate, sodium lauryl sarcosinate, and sodium laureth sulfate.

13. (Withdrawn) The formulation of claim 11 wherein the amphoteric surfactant comprises oleyl betaine or cocamidopropyl betaine.

14. (Withdrawn) The formulation of claim 7 wherein the surfactant comprises at least one nonionic and at least one cationic surfactant.

15. (Withdrawn) The formulation of claim 14 wherein the nonionic surfactant comprises at least one surfactant selected from the group consisting of Polysorbate 20, Polysorbate 40, Polysorbate 60, and Polysorbate 80.

16. (Withdrawn) The formulation of claim 14 wherein the cationic surfactant comprises

cocamidopropyl phosphatidyl PG-dimonium chloride.

17. (Withdrawn) The formulation of claim 2 wherein the formulation vehicle further comprises at least one ingredient selected from the group consisting of viscosity adjusting agents, emollients, and moisturizers.

18. (Withdrawn) The formulation of claim 2 wherein the formulation vehicle comprises water and at least one ingredient selected from the group consisting of preservatives, fragrances, dyes, pigments, and colorants.

19. (Canceled)

20. (Withdrawn – Currently amended) The formulation of claim 76 † wherein the active ingredient is selected from the group consisting of antibiotic, local anesthetic, sunscreen, retinoid, antiperspirant, antihistamine, analgesic, contraceptive, anti-acne and anti-dandruff ingredients.

Claims 21-25 (Canceled)

26. (Original) The formulation of claim 3 wherein the formulation comprises a surfactant.

27. (Original) The formulation of claim 26 wherein the surfactant comprises a nonionic surfactant.

28. (Withdrawn) The formulation of claim 26 wherein the surfactant comprises a cationic surfactant.

29. (Withdrawn) The formulation of claim 26 wherein the surfactant comprises an amphoteric surfactant.

30. (Withdrawn) The formulation of claim 26 wherein the surfactant comprises at least one anionic surfactant and at least one amphoteric surfactant.

31. (Withdrawn) The formulation of claim 30 wherein the anionic surfactant comprises at least one surfactant selected from the group consisting of ammonium laureth sulfate, TEA laureth sulfate, sodium lauryl sulfosuccinate, sodium lauryl sarcosinate, and sodium laureth sulfate.

32. (Withdrawn) The formulation of claim 30 wherein the amphoteric surfactant comprises oleyl betaine or cocamidopropyl betaine.

33. (Original) The formulation of claim 3 wherein the formulation vehicle comprises at least one ingredient selected from the group consisting of viscosity adjusting agents, emollients, and moisturizers.

34. (Original) The formulation of claim 3 wherein the formulation vehicle comprises at least one ingredient selected from the group consisting of preservatives, fragrances, dyes, pigments, and colorants.

35. (Canceled)

36. (Currently amended) The formulation of claim 76 ~~4~~ wherein the active ingredient is selected from the group consisting of antibiotic, local anesthetic, sunscreen, retinoid, antiperspirant, antihistamine, analgesic, contraceptive, anti-acne and anti-dandruff ingredients.

37. (Canceled)

38. (Currently amended) The formulation of claim 1 ~~37~~ wherein the irritant ingredient is

selected from the group consisting of carboxylic acids, keto acids,  $\alpha$ -hydroxy acids,  $\beta$ -hydroxy acids, retinoids, peroxides, and organic alcohols.

39. (Original) The formulation of claim 38 wherein the irritant ingredient comprises an  $\alpha$ -hydroxy acid.

40. (Original) The formulation of claim 39 wherein the  $\alpha$ -hydroxy acid comprises at least one acid selected from the group consisting of lactic acid, glycolic acid, citric acid, and salts thereof.

41. (Withdrawn – Currently amended) The formulation of claim 1 37 wherein the irritant ingredient is a retinoid selected from tretinoin, retinol, retinal, and derivatives thereof.

42. (Original) The formulation of claim 3 wherein the formulation vehicle comprises an emulsifier.

43. (Original) The formulation of claim 42 wherein the emulsifier comprises a nonionic emulsifier.

44. (Original) The formulation of claim 42 wherein the emulsifier comprises a cationic emulsifier.

45. (Original) The formulation of claim 42 wherein the emulsifier comprises at least one nonionic emulsifier and at least one cationic emulsifier.

46. (Withdrawn) The formulation of claim 4 wherein the formulation vehicle comprises a surfactant.

47. (Withdrawn) The formulation of claim 46 wherein the surfactant comprises a

nonionic surfactant.

48. (Withdrawn) The formulation of claim 46 wherein the surfactant comprises a cationic surfactant.

49. (Withdrawn) The formulation of claim 46 wherein the surfactant comprises an amphoteric surfactant.

50. (Withdrawn) The formulation of claim 46 wherein the surfactant comprises at least one anionic surfactant and at least one amphoteric surfactant.

51. (Withdrawn) The formulation of claim 50 wherein the anionic surfactant comprises at least one surfactant selected from the group consisting of ammonium laureth sulfate, TEA laureth sulfate, sodium lauryl sulfosuccinate, sodium lauryl sarcosinate, and sodium laureth sulfate.

52. (Withdrawn) The formulation of claim 50 wherein the amphoteric surfactant comprises oleyl betaine or cocamidopropyl betaine.

53. (Withdrawn) The formulation of claim 4 wherein the formulation vehicle comprises at least one ingredient selected from the group consisting of viscosity adjusting agents, emollients and moisturizers.

54. (Withdrawn) The formulation of claim 4 wherein the formulation vehicle comprises at least one ingredient selected from the group consisting of preservatives, fragrances, dyes, pigments, and colorants.

55. (Canceled)

56. (Withdrawn – Currently amended) The formulation of claim 76 wherein the active

ingredient is selected from the group consisting of antibiotic, local anesthetic, sunscreen, retinoid, antiperspirant, antihistamine, analgesic, contraceptive, anti-acne and anti-dandruff ingredients.

Claims 57-61 (Canceled)

62. (Withdrawn) The formulation of claim 4 wherein the formulation vehicle comprises an emulsifier.

63. (Withdrawn) The formulation of claim 62 wherein the emulsifier comprises a nonionic emulsifier.

64. (Withdrawn) The formulation of claim 62 wherein the emulsifier comprises a cationic emulsifier.

65. (Withdrawn) The formulation of claim 62 wherein the emulsifier comprises at least one nonionic emulsifier and at least one cationic emulsifier.

66. (New) A topical formulation for reducing skin irritation in animals comprising:  
a non-strontium active ingredient for effecting primary activity of the topical formulation;  
a salt comprising aqueous-soluble divalent strontium cation; and  
a suitable topical formulation vehicle,  
with the proviso that the topical formulation is not a dentifrice.

67. (New) The formulation of claim 66, comprising about 0.5% by weight to about 14% by weight of the total formulation of the aqueous-soluble divalent strontium cation.

68. (New) The formulation of claim 66, wherein salt in the formulation consists essentially of aqueous-soluble divalent strontium cation and one or more counteranions.

69. (New) A depilatory formulation comprising:  
a depilatory agent; and  
a salt comprising aqueous-soluble divalent strontium cation.
70. (New) The depilatory formulation of claim 69, wherein the depilatory agent is non-strontium.
71. (New) The depilatory formulation of claim 69, wherein the salt comprises one or more acidic anion species.
72. (New) The depilatory formulation of claim 71, wherein the acidic anion species are selected from chloride, nitrate, and acetate.
73. (New) The depilatory formulation of claim 69, wherein the salt is selected from strontium chloride, strontium nitrate, and strontium acetate.
74. (New) The depilatory formulation of claim 69, wherein the salt comprises a halogen anion.
75. (New) A composition for effective removal of hair with reduced skin irritation, the composition comprising:  
a non-strontium active agent for removal of hair; and  
a salt comprising aqueous-soluble strontium cation.
76. (New) The formulation of claim 1, wherein the formulation comprises an active ingredient.
77. (New) The formulation of claim 1, wherein the formulation comprises a non-strontium active ingredient.